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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,958

08/10/2006

Yoichi Takagi

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WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

GREGORIO, GUINEVER S

ART UNIT

PAPER NUMBER

4162

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,958	<b>Applicant(s)</b> TAKAGI, YOICHI	
	<b>Examiner</b> GUINEVER S. GREGORIO	<b>Art Unit</b> 4162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☒ Claim(s) 10-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/10/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because of numerous typographical errors. For example the specification states “50-1  $\mu\text{m}$ ” on page 5, line 14 of the specification. Additionally, the specification states “20-1  $\text{m}^2/\text{g}$ ” on page 5, line 19 of the specification. Please correct these and any other typographical errors which may be present in the specification. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities: The claim recites “50-1  $\mu\text{m}$ ”. This appears to be a typographical error. Appropriate correction is required.
2. Claim 2 is objected to because of the following informalities: The claim recites “20-1  $\text{m}^2/\text{g}$ ”. This appears to be a typographical error. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nozaki et al. (Japanese Pub. No. 2001-179214) in further view of Yasuhiro (Japanese Pub. No. 05-043318). Nozaki et al. teaches collecting the combustion ash produced from burned petroleum coke (paragraph 10, lines 6-8). Nozaki et al. teaches using water and sulfuric acid to make an aqueous slurry then using solid liquid separation techniques on the aqueous slurry to separate the ash from the metal components (paragraph 12, lines 1-4). The method taught by Nozaki et al. is commensurate with applicant's method for collecting and purifying amorphous carbon recited by applicant in the specification: paragraph 20, lines 4-5 and paragraph 26 lines 1-10. Nozaki et al. does not teach particle size. Yasuhiro teaches raw pitch coke obtained from the carbonization of coal tar (paragraph 6, lines 1-3). Yasuhiro teaches the ash content of the raw pitch coke is rich with aromatic compounds (paragraph 6, lines 3-4). Furthermore, Yasuhiro teaches an average grain diameter of the raw pitch coke of 1-45 micrometers (paragraph 7, lines 1-2). Furthermore, Yasuhiro teaches is if the particles are submicron the molding material will become pressed but if the particles are greater than 250 micrometers then the density of the product comprised of the ash will be affected (paragraph 7, lines 4-8). It would have been obvious to one of ordinary skill in the art at the time of the invention to limit the particle size of the ash to prevent compression or adverse affects on the density of the composition comprised of the ash.

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4. Regarding claims 10, 11, and 12 Examiner takes the position the ash will have the recited weight depreciation limitation, spacing, specific area, and pore volume because the method of creating and purifying the ash is the same stated by applicant in the specification. Additionally, with the limitation on the particle size the ash should inherently possess the same qualities as the amorphous carbon claimed by applicant.
5. Regarding claims 13, 14, 17, and 18 Nozaki et al. teaches using the combustion ash as a raw material for cement (paragraph 10, lines 3-5).
6. Regarding claims 15 and 16, Yasuhiro teaches mixing raw pitch coke with carbon aggregates (paragraph 3, line 12). Furthermore, Yasuhiro teaches 5 to 20% of the weight raw pitch coke (paragraph 3, lines 10-11). Yasuhiro teaches the composition for making plastics with high density (paragraph 3, lines 10-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the blend recited by Yasuhiro because the blend produces plastic products of high density.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GUINEVER S. GREGORIO whose telephone number is (571)270-5827. The examiner can normally be reached on Monday-Thursday, 10:30-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gsg

/Jennifer McNeil/  
Supervisory Patent Examiner, Art Unit 4162